REMARKS/ARGUMENTS

1. Rejection of claims 1, 7, 10-12, and 21 under 35 U.S.C. 103(a):

Claims 1, 7, 10-12, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiyo et al. (US 6,100,545) in view of Yamazaki et al. (US 2003/0062519).

Response:

The applicant respectfully submits that the Chiyo patent is being misconstrued as teaching both a first reaction layer and a second reaction layer in Figure 18.

Claim 1 recites the limitations of a first reaction layer formed over the upper surface of the metal reflecting layer, a transparent adhesive layer formed over the first reaction layer, and a second reaction layer formed over the transparent adhesive layer, wherein each of the first and second reaction layers is formed to enhance an adhesion provided by the transparent adhesive layer. The first reaction layer is formed to enhance the adhesion between the metal reflecting layer and the transparent adhesive layer, whereas the second reaction layer is formed to enhance the adhesion between the nitride light-emitting stack layer and the transparent adhesive layer.

Claim 1 recites that "each of the first and second reaction layers is formed to enhance an adhesion provided by the transparent adhesive layer." This limitation is not merely stating the intended use of the first and second reaction layers, but is instead specifying the connection between the first and second reaction layers and the transparent adhesive layer. The materials of the first and second reaction layers would have to be carefully chosen so as to enhance the adhesion provided by the transparent adhesive layer. Only some materials have this characteristic, and thus the relationship between the first and second reaction layers and the transparent adhesive layer is not simply an intended use.

Moreover, the Examiner states that Chiyo teaches in figure 18 a first reaction layer 2 and a second reaction layer 3. In actuality, Chiyo teaches in figure 18 a substrate 1 formed out of sapphire and a Ti layer 2 formed on the surface of the substrate 1 to co-form a reflecting substrate. As described in column 2, lines 41-47, and in column 10, lines 20-40, Chiyo teaches that a Ti layer 2 is formed on the surface of the substrate 1 such that the Ti layer 2 and the substrate 1 together form a reflecting substrate. Since the Ti layer 2 serves to reflect light emitted from the AlGaInN semiconductor layer, the Ti layer 2 cannot also serve as a first reaction layer at the same time. In fact, there is nowhere suggesting that Ti can be analogous to the reaction layer as described in claim 1. For these reasons, the applicant respectfully submits that Chiyo does not teach the claimed limitation of a first reaction layer. Furthermore, the prior art references of Chiyo and Yamazaki offer no motivation or suggestions to create the claimed relation between the first and second reaction layers and the transparent adhesive layer.

In addition, the combination of Chiyo and Yamazaki still fails to teach all of the claimed limitations contained in claims 1 and 12.

In paragraph 35-37, Yamazaki discloses a bonding layer is sandwiched by two passivation films, wherein the bonding layer is a stress relaxing film, and the sandwiching passivation films are utilized to prevent the bonding layer from moisture, oxygen, and other impurities permeation.

Chiyo recites in column 2, lines 27-35 with respect to element 3 in Fig.18 "On the other hand, a semiconductor device can be constituted which has a structure that **a buffer layer for buffering stress is interposed between the Si substrate and the AlGaInN semiconductor layer**. As a material for constituting the buffer layer for buffering stress, some metal materials are paid attention. Among the materials, Ti is paid attention

especially. That is, a semiconductor device has a structure that a Ti layer is formed on a Si substrate and a GaN type semiconductor layer is formed on the Ti layer. "

Thus, from the combination of Chiyo further in view of Yamazaki, persons skilled in the art, under the motivation of using the buffer layer for buffering stress, would think Yamazaki's bonding layer and Chiyo's buffer layer are interchangeable. However, this leads to a contradiction in the Examiner's use of Chiyo's buffer layer 3 in Fig.18 as the second reaction layer while also using the buffer layer 3 as the transparent adhesive layer (the bonding layer as a stress relaxing film in Yamazaki) at the same time.

Therefore, claim 1 is patentable over the combination of Chiyo and Yamazaki. Claims 2-25 are dependent on claim 1, and should be allowed if claim 1 is allowed. Reconsideration of claims 1-25 is therefore respectfully requested.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Sincerely yours,

/Winston Hsu/ Date: July 6, 2006

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